HINES
996768

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE 'BIOSIS' ENTERED AT 14:59:31 ON 28 OCT 1999

FILE 'EMBASE' ENTERED AT 14:59:31 ON 28 OCT 1999

FILE 'WPIDS' ENTERED AT 14:59:31 ON 28 OCT 1999

L1 0 FILE MEDLINE
L2 0 FILE CAPLUS
L3 0 FILE BIOSIS
L4 0 FILE EMBASE
L5 0 FILE WPIDS

TOTAL FOR ALL FILES
L6 0 (IMMUNOFUNCTION? OR TOXIC? OR MODULAT?) AND BLOOD REACT? AND ((CRYOPRESERV? OR FROZEN)(2A)(BLOOD OR WHOLE BLOOD OR TRANSFUS?))

=> s (immunofunction? or toxic? or modulat?) and ((cryopreserv? or frozen)(2a)(blood or whole blood or transfus?))
L7 25 FILE MEDLINE
L8 13 FILE CAPLUS
L9 41 FILE BIOSIS
L10 23 FILE EMBASE
L11 1 FILE WPIDS

TOTAL FOR ALL FILES
L12 103 (IMMUNOFUNCTION? OR TOXIC? OR MODULAT?) AND ((CRYOPRESERV? OR FROZEN)(2A)(BLOOD OR WHOLE BLOOD OR TRANSFUS?))

=> s (test or assay) and l12
L13 8 FILE MEDLINE
L14 4 FILE CAPLUS
L15 10 FILE BIOSIS
L16 6 FILE EMBASE
L17 1 FILE WPIDS

TOTAL FOR ALL FILES
L18 29 (TEST OR ASSAY) AND L12

=> s (detect? or measur?) and l12
L19 9 FILE MEDLINE
L20 3 FILE CAPLUS
L21 11 FILE BIOSIS
L22 7 FILE EMBASE
L23 1 FILE WPIDS

TOTAL FOR ALL FILES
L24 31 (DETECT? OR MEASUR?) AND L12

=> s (l18 or l24) and anticoagulat?
L25 0 FILE MEDLINE
L26 0 FILE CAPLUS
L27 0 FILE BIOSIS

L28 0 FILE EMBASE
L29 0 FILE WPIDS

TOTAL FOR ALL FILES
L30 0 (L18 OR L24) AND ANTICOAGULAT?

=> s l18 or l24
L31 11 FILE MEDLINE
L32 5 FILE CAPLUS
L33 15 FILE BIOSIS
L34 7 FILE EMBASE
L35 1 FILE WPIDS

TOTAL FOR ALL FILES
L36 39 L18 OR L24

=> dup rem l36
PROCESSING COMPLETED FOR L36
L37 26 DUP REM L36 (13 DUPLICATES REMOVED)

=> d 1-26 cbib abs;s wendel a?/au,in;s hartung t?/au,in

L37 ANSWER 1 OF 26 MEDLINE DUPLICATE 1
1999227260 Document Number: 99227260. Use of **cryopreserved** peripheral mononuclear **blood** cells in biomonitoring. Risom L; Knudsen L E. (Danish Cancer Society, Standboulevarden 49, DK-2100, Copenhagen O, Denmark.. risom@cancer.dk). MUTATION RESEARCH, (1999 Apr 6) 440 (2) 131-8. Journal code: NNA. ISSN: 0027-5107. Pub. country: Netherlands. Language: English.

AB This study was performed to investigate the effect of storing blood samples by freezing on selected biomarkers and possible implications for biomonitoring. Comparative **measurements** were performed in order to investigate the use of cryopreserved vs. freshly separated peripheral mononuclear blood cells (PMBC) obtained from donor blood. **Measurements** of DNA-repair, mutant frequency, and subcell content were included. Samples for large biomonitoring studies are usually taken from study groups within a short time period of days/weeks and storing of study material for later analysis can be necessary. We **measured** the DNA repair activity as dimethylsulfate induced unscheduled DNA synthesis (UDS) in PMBC incubated with either autologous plasma or fetal bovine serum (FBS). Comparison of the hprt mutant frequency by the T cell cloning **assay** was made in parallel. Finally the content of B/T-lymphocytes and monocytes was **measured** in phytohemaglutinin (PHA)-stimulated cultures at different time intervals. The results showed a higher DNA repair activity in cryopreserved samples compared with fresh samples. We also found differences in mutant frequencies with higher values in fresh samples. A significant correlation of frequencies was seen when comparing fresh with cryopreserved samples. Furthermore we recommend fresh human plasma used in UDS incubation media. Copyright 1999 Elsevier Science B.V.

L37 ANSWER 2 OF 26 MEDLINE DUPLICATE 2
1999242689 Document Number: 99242689. Evaluation of DNA damage by the Comet **assay** in shoe workers exposed to toluene and other organic solvents. Pitarque M; Vaglenov A; Nosko M; Hirvonen A; Norppa H; Creus A; Marcos R. (Grup de Mutag`enesi, Departament de Gen`etica i de Microbiologia, Edifici Cn, Universitat Aut`onoma de Barcelona, 08193 Bellaterra, Spain.)MUTATION RESEARCH, (1999 Apr 26) 441 (1) 115-27. Journal code: NNA. ISSN: 0027-5107. Pub. country: Netherlands. Language: English.

AB The alkaline single-cell gel electrophoresis (or Comet) **assay** was applied to evaluate DNA damage in **cryopreserved** peripheral **blood** mononuclear leukocytes from 34 female shoe workers exposed to organic solvents and a group of 19 non-exposed women. We also investigated whether the polymorphisms of glutathione S-transferase M1 (GSTM1) and T1 (GSTT1) genes affect individual level of DNA damage possibly induced by the solvent exposure. Chemical **measurements** of workplace air in the two factories studied showed that the workers were exposed to acetone, gasoline, and toluene in both factories and to ethylacetate and diisocyanate in one factory. In the exposed workers, the average level of blood hemoglobin was lower and that of urinary hippuric acid higher than in the non-exposed individuals. However, the occupational exposure to organic solvents did not affect the Comet values. Neither did age, smoking, or the GSTM1 genotype have any effect on the outcome of this **assay**. The low prevalence of the GSTT1-null genotype precluded conclusions on the influence of GSTT1 polymorphism. Copyright 1999 Elsevier Science B.V.

L37 ANSWER 3 OF 26 BIOSIS COPYRIGHT 1999 BIOSIS

1997:522116 Document No.: PREV199799821319. Blood sample containing 1.44 permille ethanol doesn't contain ethylglucuronide: Case report. Schmitt, Georg; Droenner, Peter; Aderjan, Rolf; Skopp, Gisela. Inst. Rechtsmed. Verkehrsmed., Vossstr. 2, 69115 Heidelberg Germany. Blutalkohol, (1997) Vol. 34, No. 5, pp. 371-378. ISSN: 0006-5250. Language: German. Summary Language: German; English.

AB In 1995, while on duty, a drug squad officer (Mr. S.) caused a car accident in which his front-seat passenger was killed. 3 1/2 hours after the accident a blood sample was taken from the unconscious man which contained 1.44 permille ethanol. This led to the conviction, the charges being driving while intoxicated and manslaughter through culpable neglect.

In the appeal procedures in November 1996 Mr. S. was freed of the DWI charges as there was no definite proof. No ethanol metabolite ethylgucuronide (EtG) could be **detected** in the serum of the blood sample which had been **frozen** separately. The **blood** sample was taken using a normal infusion set which was not in accordance with forensic instructions. A contamination with a disinfectant containing ethanol can therefore not be excluded. The court justified its decision with our examination results: 1) No ethylglucuronide could be **detected**, whereas with such a high BAC, the amount of 0.1 mg/L should have been clearly exceeded (by at least 10 times). Further **tests** clarified if the metabolism product had not been formed in the offender's body and if it possessed sufficient stability for storage (over 1.5 years). 2) Glucuronide formed out of morphine given after the accident was **detected**. 3) The accused formed EtG in a drinking experiment. After the consumption of 1.5 L of beer a maximum serum concentration of 1.3 mg/L was found. 4) EtG proved to be storable long enough in frozen serum.

L37 ANSWER 4 OF 26 CAPLUS COPYRIGHT 1999 ACS

1998:191648 Document No. 128:201849 DNA damage caused by **cryopreservation** of peripheral **blood** cells **detected** by single cell GE1 **assay**. Ni, Zuyao; Feng, Bing; Meng, Jianfeng; Yang, Chengfeng; Liu, Yuqing; Li, Shouqi; Jiang, Xuezhi; Zhuang, Zhixuong; Zhang, Qiao (School of Public Health, West China University of Medical Science, Chengdu, 610041, Peop. Rep. China).

Zhongguo Gonggong Weisheng Xuebao, 16(5), 313-315 (Chinese) 1997. CODEN: ZGWXEQ. ISSN: 1001-0572. Publisher: Zhongguo Gonggong Weisheng Zazhi Chubanshe.

AB DNA damage is of concern to research in many fields, esp. cancer research and **toxicol**. To evaluate the possible loss of DNA structural integrity during freezing of cells collected over a period of time, recently developed single cell gel (SCG) **assay** has been employed to **measure** the effects of DNA damage in individual peripheral blood cells stored at 4.degree., -20.degree. and -80.degree., resp. The results showed that the basal ratio of comet cells in frozen cells was significantly higher than that of fresh cells. The increase of the frozen time can enhance the effects of DNA damage. The results suggested that evaluation of DNA damage of cells stored by cryopreservation may produce artificially exaggerated levels of damage, which could limit anal. interpretation.

L37 ANSWER 5 OF 26 BIOSIS COPYRIGHT 1999 BIOSIS

1997:501904 Document No.: PREV199799801107. Antibody studies in a patient with acute thrombocytopenia following infusion of plasma containing anti-PI-A1.

Brunner-Bolliger, S.; Kiefel, V.; Horber, F. F.; Nydegger, U. E.; Berchtold, P. (1). (1) Dep. Med., Univ. Hospital, Inselspital, 3010 Berne Switzerland. American Journal of Hematology, (1997) Vol. 56, No. 2, pp. 119-121. ISSN: 0361-8609. Language: English.

AB Immune thrombocytopenia due to passive transfer of anti-PI-A1 alloantibody has been noted as a rare but potentially dangerous complication of plasma transfusions. We report a patient with a preoperative platelet count of 241 times 10/1 who developed severe thrombocytopenia within 2 hr following transfusion of 2 U of fresh frozen plasma. The plasma donor was found to be a pI-A1-negative woman. The platelet count of the PI-A1-positive patient recovered within 7 days to normal values. In the frozen plasma, excessive antibody binding to GPIIb-IIIa on the recipient's platelets was **detected**. The antibody was shown to have anti-PI-A1-specificity. Only 40 min after **transfusion** of the **frozen** plasma, no antibody was **detected** in the plasma of the recipient. This case suggests that passively administered anti-PI-A1 alloantibody is immediately adsorbed onto the recipient's platelets and thus removed from circulation.

L37 ANSWER 6 OF 26 MEDLINE

96243742 Document Number: 96243742. CD34-positive cells isolated from **cryopreserved** peripheral-**blood** progenitor cells can be expanded ex vivo and used for transplantation with little or no **toxicity**. Alcorn M J; Holyoake T L; Richmond L; Pearson C; Farrell E; Kyle B; Dunlop D J; Fitzsimons E; Steward W P; Pragnell I B; Franklin I M. (Department of Haematology/Medical Oncology, Glasgow Royal Infirmary, United Kingdom.)JOURNAL OF CLINICAL ONCOLOGY, (1996 Jun) 14 (6) 1839-47. Journal code: JCO. ISSN: 0732-183X. Pub. country: United States. Language: English.

AB PURPOSE: The objectives of this phase I study were to assess the feasibility of using **cryopreserved** peripheral-**blood** progenitor cells (PBPC) for large-scale CD34 selection and subsequent expansion, and the safety of their use for reinfusion following chemoradiotherapy. PATIENTS AND METHODS: For 10 patients with nonmyeloid malignancy, an aliquot from a PBPC harvest was recovered from liquid

nitrogen, and CD34 selected using the Isolex system (Baxter Healthcare, Newbury, United Kingdom) and expanded for 8 days ex vivo in a medium free of animal proteins but supplemented with autologous serum, stemcell factor (SCF), interleukin-1 beta (IL-1 beta), IL-3, IL-6, and erythropoietin. RESULTS: The mean increase for cell number was 21-fold, for colony-forming units-granulocyte/macrophage (CFU-GM) 139-fold, and for burst-forming units-erythroid (BFU-E) 114-fold. The expanded cells were reinfused in tandem with unmanipulated material (> or = 25 x 10(4) CFU-GM/kg). The patients did not experience any adverse effects immediately on cell infusion or within 48 hours. The 10 index patients were compared with 10 historical controls for parameters of myelosuppressive morbidity. In this small study, there were no differences in either neutrophil or platelet recovery between the patients who received expanded cells and historical controls. CONCLUSION: These data demonstrate that CD34 cells can successfully be selected from cryopreserved material, expanded ex vivo on a large scale, and safely reinfused following myeloablative conditioning regimens.

L37 ANSWER 7 OF 26 MEDLINE DUPLICATE 3
97071918 Document Number: 97071918. Studies of proliferative responses by long-term-**cryopreserved** peripheral **blood** mononuclear cells to bacterial components associated with periodontitis. Miller G A; Hickey M F; D'Alesandro M M; Nicoll B K. (Geo-Centers, Inc., Fort Washington, Maryland, USA.)CLINICAL AND DIAGNOSTIC LABORATORY IMMUNOLOGY, (1996 Nov) 3 (6) 710-6. Journal code: CB7. ISSN: 1071-412X. Pub. country: United States. Language: English.

AB Freezing techniques provide a means for repeating and extending immunological **assays** with frozen aliquots of an individual's peripheral blood mononuclear cell fraction. Lymphocytes which are stored frozen for a limited time retain their ability to respond to polyclonal B-cell activators, mitogens, and antigens of dental interest. Our studies extend these previous findings by determining lymphocyte functional activity following frozen storage for up to 100 weeks. In addition, the autologous immune response was **measured** by spontaneous lymphocyte proliferation following 0, 1, 40, and 60 weeks of frozen storage. Peak responses for all individuals occurred at day 7 of incubation. The lymphocyte proliferative response to the superantigens **toxic** shock syndrome toxin-1 (TSST-1) and Staphylococcus enterotoxin A (SEA) were not changed after 100 weeks of frozen storage. Maximum responses varied among the individuals but occurred at equivalent stimulator concentrations. However, slopes generated from data obtained following 0, 4, 13, 20, 30, 50, 88, and 100 weeks of frozen storage showed no significant deviation from zero ($P > 0.05$) for all individuals tested. After 100 weeks of storage, the total changes in proliferative activity (counts per minute per week) were -2.1% +/- 16.8% and -5.5% +/- 17.0% for TSST-1 and SEA, respectively. The lymphocyte proliferative responses to pokeweed mitogen, concanavalin A, and sonicates of two periodontal pathogens (Porphyromonas gingivalis and Actinobacillus actinomycetemcomitans) following frozen storage were similar to those with TSST-1 and SEA. These results indicate that peripheral blood mononuclear cells stored frozen may serve as appropriate controls to monitor changes in the disease state long-term periodontal treatment.

L37 ANSWER 8 OF 26 BIOSIS COPYRIGHT 1999 BIOSIS
1996:569044 Document No.: PREV199799298400. Preliminary studies on the

cryopreservation of red **blood** cells of rainbow trout (Oncorhynchus mykiss) and European catfish (Silurus glanis L. Zhang, Tiantian (1); Maisse, Gerard; Rawson, David M. (1). (1) Res. Cent., Univ. Luton, 24 Crawley Green Road, Luton, Bedfordshire LU1 3LF UK. Cryo Letters, (1996) Vol. 17, No. 5, pp. 303-308. ISSN: 0143-2044. Language: English.

AB **Cryopreservation** of red **blood** cells of rainbow trout (Oncorhynchus mykiss) and European catfish (Silurus glanis L.) was studied using controlled slow cooling. Dimethyl sulfoxide (DMSO) was found to be the least **toxic** and most effective cryoprotectant when compared with methanol, glycerol and propan-1,2-diol. The best recoveries of intact cells, achieved after cryopreservation under the selected conditions, were 86.3 +- 8.1 and 89.7 +- 7.9 for rainbow trout and catfish respectively. These results open up the possibility of **cryopreserved** fish red **blood** cells being used in cytotoxic **assays**.

L37 ANSWER 9 OF 26 EMBASE COPYRIGHT 1999 ELSEVIER SCI. B.V.

96069061 EMBASE Document No.: 1996069061. Blood and urine bioindicators for methanol exposure: Effect of chilled and frozen sample storage. Batterman S.A.; Xiao H.; Franzblau A.. Environmental and Industrial Health, University of Michigan, 109 Observatory Drive,Ann Arbor, MI 48109-2029, United States. Applied Occupational and Environmental Hygiene 11/1 (25-29) 1996.
ISSN: 1047-322X. CODEN: AOEHE. Pub. Country: United States. Language: English. Summary Language: English.

AB **Measurements** of methanol concentrations in blood and urine may be used as bioindicators of methanol exposure that account for all exposure pathways. These **measurements** will be practical if the integrity of samples from the time of collection to the time of analysis can be maintained. This study was designed to **test** the stability of methanol in blood and urine samples stored at 4.degree. and -20.degree.C for various periods of time up to 7 months. Methanol recoveries of the stored blood samples were found to fit a first-order decay model, with the best estimates for the half-life of methanol in chilled and **frozen blood** of 114 .+-. 14 and 240 .+-. 58 days, respectively. A half-life of 562 .+-. 145 days is estimated for chilled and frozen urine. These long half- lives enhance the utility of methanol bioindicators. While freezing increased the recovery in blood, it also decreased the reproducibility of results. Thus, refrigeration of samples is recommended if the analysis will be completed within about a month of sample collection, and freezing of samples is suggested otherwise. For blood, sample preservation was not enhanced using an all-glass storage system, and a conventional sampling container yielded equivalent results.

L37 ANSWER 10 OF 26 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD

AN 1995-328029 [42] WPIDS

AB WO 9523968 A UPAB: 19951026
Method for obtaining or determining angiogenesis comprises culturing a blood vessel fragment together with a physiological gel and suitable nutrients for a time sufficient to allow growth of new vascular tissue, where the fragment is cultured on a miniaturised scale and the nutrients are replaced infrequently.

Also claimed are: (a) a method for determining angiogenesis as above, using a sample of human tissue and examining the fragment for new growth, and (b) a kit for carrying out the above methods, opt. adapted to contain

physiological gel precursor and which can use opt. **frozen blood** vessel fragments.

USE - The methods can be used to **test** substances for angiogenesis **modulation** activity, inhibit and/or induce regression of angiogenesis, and to **test** responsiveness of anti-angiogenic therapy (claimed).

ADVANTAGE - The method is advantageous over previous in vivo **assays** in that it removes:(a) the need for artificially induced angiogenesis;(b) the requirement for a sustained-release polymeric vehicle for the angiogenic substance and inhibitor, and(c) the technical complexities involved e.g. use of live animals and **measuring** the outcome. The **test** is also advantageous over previous in vitro **assays** in that such **assays** are highly artificial, and may not represent a physiological response as the endothelial cells involved have been cultured in the presence of growth factors for some time before use.

Dwg.1a/5

L37 ANSWER 11 OF 26 BIOSIS COPYRIGHT 1999 BIOSIS

1995:264618 Document No.: PREV199598278918. Evaluation of the effects of cryopreservation of isolated erythrocytes and leukocytes of largemouth bass by flow cytometry. Fisher, S. K. (1); Lingenfelser, J. T.; Jagoe, C. H.; Dallas, C. E. (1). (1) Dep. Pharmacol. and Toxicol., Univ. Ga., Athens, GA 30602 USA. Journal of Fish Biology, (1995) Vol. 46, No. 3, pp. 432-441. ISSN: 0022-1112. Language: English.

AB We examined the effects of separation and freezing on fish leukocyte and erythrocyte morphology by light microscopy and on DNA content as **measured** by flow cytometry (FCM). Leukocytes and erythrocytes of largemouth bass Micropterus salmoides were isolated by density gradient centrifugation of **whole blood**, and **frozen** in liquid nitrogen in a buffer containing DMSO as a cryopreservative. The coefficient of variation (CV) of the G-0/G-1 peak of the cells was used to assess variation in nuclear DNA content within cell populations before and after separation and freezing treatments. In erythrocytes, the CV did not change significantly (P gt 0.05) when nuclei were isolated and stained without freezing or when erythrocytes were frozen prior to nuclear isolation and staining. In leukocytes, freezing and thawing prior to isolation and staining of nuclei significantly increased the CV (P lt 0.05), and produced hyperdiploid shoulders of the G-0/G-1 peak. However, the CV of leukocyte nuclei that were isolated and stained prior to freezing and the CV of non-frozen leukocyte nuclei did not differ (P gt 0.05). Microscopy showed that the freezing protocol had little effect on erythrocyte morphology, but caused irregular swelling in leukocytes. Freezing intact leukocytes also significantly (P lt 0.05) altered the apparent distribution of cells among the phases of the cell cycle as **measured** by FCM. The distributions of leukocyte nuclei that were isolated and stained prior to freezing were not different to non-frozen leukocytes. DNA **measurements** of nucleated blood cells are widely used in physiological, genetic and **toxicological** studies. Our results suggest that whole blood and erythrocytes for use in such studies can be frozen whole using a simple protocol, but leukocyte nuclei must be isolated and stained before freezing to avoid serious artifacts.

L37 ANSWER 12 OF 26 MEDLINE DUPLICATE 4

95114965 Document Number: 95114965. Blood meal manipulation and in vitro colony maintenance of Haematobia irritans (Diptera: Muscidae). Burg J G; Knapp F W; Silapanuntakul S. (Department of Entomology, University of Kentucky, Lexington 40546..)JOURNAL OF MEDICAL ENTOMOLOGY, (1994 Nov) 31

(6) 868-74. Journal code: J1B. ISSN: 0022-2585. Pub. country: United States. Language: English.

AB A series of experiments was conducted to determine survival and reproductive potential of Haematobia irritans (L.) adults that were fed sodium citrated-bovine blood diluted with deionized water, 0.5 M glucose, or 0.15 M sodium chloride (NaCl), or supplemented with adenosine triphosphate (ATP). Reproductive potential, **measured** by total number of larvae produced per female during 10-d experimental periods, improved when adult H. irritans were fed blood diluted by < 22% with deionized water, NaCl, or glucose, whereas female survival improved when fed blood diluted with deionized water or NaCl (by approximately 25%). Male survival declined whenever blood meals were diluted. Larval production also improved when blood previously stored at -20 degrees C was diluted by approximately 21% with deionized water. Addition of ATP to blood stored at 3 degrees C did not improve larval production or female survival; however, ATP added to blood stored at -20 degrees C increased larval production and female survival. Male survival was not improved by addition of ATP to previously refrigerated or **frozen blood. Blood** meals were **toxic** to H. irritans when > or = 5 x 10(-2) M ATP was added to previously refrigerated or **frozen blood**. A colony of H. irritans was maintained for five generations by feeding adult flies on citrated bovine blood that had been stored at -20 degrees C, supplemented with 5 x 10(-3) M ATP, and diluted with deionized water. Flies were fed through a nylon-reinforced silicone membrane throughout this experimental period. Female survival and larval production were unaffected by the adult fly feeding regimen.(ABSTRACT TRUNCATED AT 250 WORDS)

L37 ANSWER 13 OF 26 MEDLINE DUPLICATE 5

93332282 Document Number: 93332282. [Anesthesia for non-specific surgery in a post-transplantation patient]. Anesthesie pour chirurgie non specifique chez le patient transplante. Steib A; Freys G; Otteni J C. (Service d'Anesthesie et de Reanimation chirurgicale, Hopitaux Universitaires de Strasbourg, Hopital de Hautepierre..)ANNALES FRANCAISES D ANESTHESIE ET DE REANIMATION, (1993) 12 (1) 27-37. Ref: 47. Journal code: 4ZT. ISSN: 0750-7658. Pub. country: France. Language: French.

AB The increase of non specific surgeries in transplanted patients may be related to the better survival achieved by the efficacy of immunosuppressive therapy and improved surgical and intensive care conditions. Therefore, the anaesthetist may be mandated to give anaesthesia in such patients, treated in hospitals which are not involved in transplantation procedures. The ignorance of the main physiologic and pharmacological changes in the new grafted organ as well as the knowledge of high risks of rejection or infection contribute to the anxiety often encountered in front of these patients. The denervated heart is unable to respond to stimulations requiring the integrity of autonomic neural mechanisms. **Modulation** of cardiac output depends on intrinsic activity (Frank-Starling mechanism) and therefore of end diastolic volume (preload). The denervated transplanted lung shows inability to elicit cough reflex; the latter is totally abolished in case of tracheal anastomosis. These physiologic changes have no deleterious effects on early cardiac and pulmonary functions following transplantation. In the same way, renal, liver or pancreatic functions are restored after respective replacement. However chronic rejection occurs frequently in 50% of patients in a mean time of 5 years following surgery except for liver transplanted patients which seem to be better protected. It results in a progressive decrease in organ function **tests**. The preoperative

assessment requires primary contact with the transplant center. This communication should give precious information about the last biological and functional results as well as about the immunosuppressive therapy. Standard preoperative investigations include **measurements** of haemoglobin, urea, electrolyte and creatinine concentrations, liver **tests**, ECG, chest X-ray and coagulation pattern. Previsible difficult intubation should be **detected** in case of previous pancreas transplantation. Immunosuppressive therapy and other treatments should not be disrupted until surgery. Usual premedication may be used. Previsional peroperative transfusion requires specific packed red **blood** cells, fresh **frozen** plasma and platelets in order to reduce CMV contamination and GVH reactions. Locoregional or general anaesthesia may be used with respect to usual contraindications. Special attention should be given in cardiac transplanted patients in order to maintain adequate preload. As atropine is ineffective, bradycardia may be treated by isoprenaline. Patients with lung transplants require a reduction of vascular loading and of hydratation and early postoperative pulmonary physiotherapy. Pancreas transplanted patients often suffer from severe cardiac diseases (coronaropathy). The immunosuppressive therapy modifies the pharmacological behavior of many anaesthetic agents. Ciclosporine enhances mainly the effects of muscle relaxants. Peroperative invasive monitoring requires full aseptic techniques. Invasive monitoring should be discussed in terms of benefit-risk ratio.(ABSTRACT TRUNCATED AT 400 WORDS)

L37 ANSWER 14 OF 26 MEDLINE DUPLICATE 6

92204142 Document Number: 92204142. High-dose combination alkylating agents with autologous bone-marrow support in patients with breast cancer: preliminary assessment of DNA damage in individual peripheral blood lymphocytes using the single cell gel electrophoresis **assay**. Tice R R; Strauss G H; Peters W P. (Integrated Laboratory Systems, Research Triangle Park, NC 27709..)MUTATION RESEARCH, (1992 Apr) 271 (2) 101-13. Journal code: NNA. ISSN: 0027-5107. Pub. country: Netherlands. Language: English.

AB The single cell gel (SCG) **assay** is a sensitive electrophoretic technique for **detecting** the presence of DNA single strand breaks and alkali-labile damage in individual cells. This technique was used to evaluate the levels of DNA damage in **cryopreserved** peripheral **blood** lymphocytes (PBLs) from 11 breast cancer patients treated with high doses of cyclophosphamide and cisplatin and provided autologous bone marrow transplantation after treatment. PBL specimens for the SCG study were obtained just prior to treatment, following the administration of cyclophosphamide and cisplatin for 2 days, and upon lymphocytic recovery. Based on a concurrent analysis of DNA damage in cryopreserved and non-cryopreserved PBL samples from three patients, the mean level of DNA migration or the dispersion of damage among cells was not affected by the process of cryopreservation. The pre-treatment samples of several patients contained PBL with increased levels of DNA damage, presumably reflecting persistent DNA damage induced by previous treatment regimens. Chemotherapy resulted in a significant but variable increase in DNA damage in PBL samples from all patients. In this limited study, the level of damage did not correlate with serum levels of cyclophosphamide or with lymphocyte **toxicity**. Among the post-treatment samples, increased levels of DNA damage were absent in most but not all patients. The presence of damaged cells in the post-treatment samples may be indicative of an inadequate therapy regimen or of DNA damage resulting from non-therapy related processes. Because of its simplicity and short processing time, the SCG **assay** can be used to evaluate levels of DNA damage during the course of therapy, allowing the dose schedule to be

altered to achieve a desired effect level.

L37 ANSWER 15 OF 26 MEDLINE DUPLICATE 7
92005468 Document Number: 92005468. Antitumor immune response and interleukin 2 production induced in colorectal cancer patients by immunization with human monoclonal anti-idiotypic antibody. Robins R A; Denton G W; Hardcastle J D; Austin E B; Baldwin R W; Durrant L G. (Cancer Research Campaign Laboratories, University of Nottingham, United Kingdom.)CANCER RESEARCH, (1991 Oct 1) 51 (19) 5425-9. Journal code: CNF. ISSN: 0008-5472. Pub. country: United States. Language: English.
AB The immunogenicity of human anti-idiotypic antibody has been investigated using a human monoclonal anti-idiotypic antibody (105AD7) which interacts with the binding site of 791T/36, a mouse monoclonal antibody against gp72
antigen. This antigen is frequently expressed in gastrointestinal cancer, therefore, six patients with advanced colorectal cancer have been immunized with 105AD7 as an aluminum hydroxide gel precipitate in a phase I clinical study. **Cryopreserved blood** mononuclear
cells were tested for in vitro proliferative responses by [3H]thymidine incorporation; plasma samples were tested by enzyme-linked immunosorbent **assay** for anti-anti-idiotypic and antitumor antibodies, and for interleukin 2. Proliferative responses to gp72 positive tumor cells were seen in four of five patients tested; parallel in vitro responses to 105AD7 anti-idiotypic antibody were seen in most of these patients. Interleukin 2 was **detected** in the plasma of four of six patients after 105AD7 immunization, with peak levels up to 7 units/ml. No **toxicity** related to anti-idiotype immunization and no antitumor or anti-anti-idiotype antibodies were seen. This study shows that human monoclonal anti-idiotype 105AD7 is immunogenic in cancer patients, inducing cellular antitumor responses and interleukin 2 production. This suggests that human monoclonal anti-idiotype antibodies may have considerable potential for immunotherapy of human cancer.

L37 ANSWER 16 OF 26 CAPLUS COPYRIGHT 1999 ACS
1991:441513 Document No. 115:41513 Induction and time course of DNA single-strand breaks in lymphocytes from patients treated with dacarbazine. Walles, S. A. Solveig; Ringborg, Ulrik (Dep. Toxicol., Natl.
Inst. O cup. Health, Solna, S-171 84, Swed.). Carcinogenesis (London), 12(6), 1153-4 (English) 1991. CODEN: CRNGDP. ISSN: 0143-3334.
AB Dacarbazine (DTIC) is an antitumor agent, used for the treatment of metastatic melanoma. It is metabolized to an alkylating agent which reacts with DNA. A fast and simple method was developed in order to **measure** drug-induced DNA damage in lymphocytes isolated from **frozen blood** samples of treated patients. The level of
DNA damage was detd. as single-strand breaks (SSB) by means of the alk. elution technique using the fluorochrome Hoechst 33258. DTIC induced SSBs
in lymphocytes. Most of the DNA damage was repaired after 20 h but after subsequent daily treatments there was an accumulation of SSB. The method described here can be used for monitoring DNA damage in lymphocytes of persons exposed to genotoxic compds.

L37 ANSWER 17 OF 26 MEDLINE DUPLICATE 8
91037136 Document Number: 91037136. Interspecies and interregional analysis of the comparative histologic thickness and laser Doppler blood flow **measurements** at five cutaneous sites in nine species.
Monteiro-Riviere N A; Bristol D G; Manning T O; Rogers R A; Riviere J E. (Cutaneous Pharmacology and Toxicology Center, College of Veterinary Medicine, North Carolina State University, Raleigh 27606.)JOURNAL OF INVESTIGATIVE DERMATOLOGY, (1990 Nov) 95 (5) 582-6. Journal code: IHZ.

ISSN: 0022-202X. Pub. country: United States. Language: English.
AB Studies in dermatology, cutaneous pharmacology, and **toxicology** utilize skin from different animal species and body sites. However, regional differences exist in topical chemical percutaneous absorption studies in man and in animal. The objective of this study was to compare epidermal thickness and number of cell layers across species and body sites using both formalin-fixed paraffin and **frozen** sections. Cutaneous **blood** flow determined by laser Doppler velocimetry (LDV) was compared to histologic data. Six animals of each of the following species were used: monkeys, pigs, dogs, cats, cows, horses, rabbits, rats, and mice. Cutaneous blood flow was determined and 6-mm skin biopsies were taken directly from the following sites: buttocks, ear, humeroscapular joint, thoracolumbar junction, and abdominal area. When the two histologic methods were compared across all species and body sites, the thickness of the epidermis was significantly greater, and the thickness of the stratum corneum significantly less, in paraffin sections versus frozen sections (p less than 0.05). There were no differences in the number of viable cell layers determined by both methods. The values for LDV-determined blood flow did not significantly correlate (p greater than 0.05) to epidermal or stratum corneum thickness. However, regional and species differences were noted in all these parameters. In conclusion, these data indicate that thickness and LDV blood flow are independent and must be evaluated separately when comparisons are made between species and body sites. This work provides a data base for future comparative studies in which a knowledge of skin thickness or blood flow might be important variables.

L37 ANSWER 18 OF 26 CAPLUS COPYRIGHT 1999 ACS
1990:232164 Document No. 112:232164 Cryopreservation of human platelets with propane-1,2-diol. Arnaud, F. G.; Pegg, D. E. (MRC Med. Cryobiol. Group, Univ. Dep. Surg., Cambridge, CB2 2AH, UK). Cryobiology, 27(2), 130-6 (English) 1990. CODEN: CRYBAS. ISSN: 0011-2240.
AB The preceding papers in this series have described techniques that permit the introduction and removal of propane-1,2-diol (propylene glycol, PG) with human platelets, in concns. up to 2M, without producing serious damage. These methods have now been used in attempts to cryopreserve platelets, with assessment of survival by the hypotonic stress response and ADP-induced aggregation. PG concns. of 0.5, 1.0, 2.0, and 2.5M and cooling rates of 0.4-100.degree./min were studied. The max. response in the hypotonic stress **test** was no better than 17% and the greatest ADP-induced aggregation was only 6%; these results were obtained with 0.5M PG, a cooling rate of 14.degree./min, and rapid warming (.apprx.150.degree./min). The failure of PG concns. >9.5M to improve survival was unexpected. When cooling was interrupted at progressively lower temps. and function assessed, it was possible to relate the extent of damage to temp. and then, with the aid of phase diagrams, it was possible to show that, irresp. of the initial concn. of PG, the extent of damage was closely correlated with the concn. of PG produced at the min. temp. used. It is concluded that the **toxicity** of PG increases so steeply with the increasing concn. produced by the sepn. of ice during freezing that this effect is sufficient to counteract the cryoprotective action of this solute for platelets.

L37 ANSWER 19 OF 26 BIOSIS COPYRIGHT 1999 BIOSIS
1983:238279 Document No.: BA75:88279. T LYMPHOCYTE SUB POPULATIONS IN RELATION

TO IMMUNO SUPPRESSION IN MEASLES AND VARICELLA. ARNEBORN P; BIBERFELD G. DEP. IMMUNOL., NATL. BACTERIOLOGICAL LAB., S-105 21 STOCKHOLM, SWEDEN.. INFECT IMMUN, (1983) 39 (1), 29-37. CODEN: INFIBR. ISSN: 0019-9567. Language: English.

AB Patients with measles or varicella were studied during the acute phase (1st wk) of illness and after recovery by lymphocyte stimulation **tests** and determinatin of T-lymphocyte subpopulations, using the monoclonal antibodies Leu 2a and Leu 3a directed at the suppressor/cytotoxic and the helper T-cell subsets, respectively. Low proliferative responses to phytohemagglutinin [PHA] were found during the acute phase of both diseases. The responses to purified protein derivative of tuberculin was low in all measles and in some varicella patients. In both infections, increased spontaneous DNA synthesis was demonstrated. In the acute phase of measles there was T lymphocytopenia but no change of the ratio between helper and suppressor/cytotoxic T lymphocytes. In the acute phase of varicella the percentage and the absolute number of Leu 2-positive (suppressor/cytotoxic) T cells were increased. The size of the lymphocytes indicated activation of this subset. **Cryopreserved blood** mononuclear cells from the acute phase of varicella suppressed the PHA response of autologous convalescent-phase cells. This was not seen when cells from measles patients were tested. Suppression of the lymphocyte stimulation response in varicella is probably caused, in part, by activation of suppressor cells; the suppression of the stimulation response in measles seems to be caused by other mechanisms.

L37 ANSWER 20 OF 26 BIOSIS COPYRIGHT 1999 BIOSIS

1983:242168 Document No.: BA75:92168. EVALUATION OF SOME CRITICAL FACTORS AFFECTING DETERMINATION OF ALUMINUM IN BLOOD PLASMA OR SERUM BY ELECTRO THERMAL ATOMIC ABSORPTION SPECTROSCOPY. FRECH W; CEDERGREN A; CEDERBERG C; VESSMAN J. DEP. ANAL. CHEM., UNIV. UMEA, S-901 87 UMEA, SWEDEN.. CLIN CHEM, (1982) 28 (11), 2259-2263. CODEN: CLCHAU. ISSN: 0009-9147. Language: English.

AB A digestion procedure involving HNO3 was described for determination of Al in blood, serum and plasma by graphite-furnace atomic absorption spectroscopy. Contamination was not a severe problem if all operations were performed in a dust-free atmosphere. Conditions for determination of Al in blood were optimum when the L'vov platform technique was used and H added to the inner gas flow of the furnace. The importance of adequate correction for nonspecific absorbance when this technique was used close to the **detection** limit was discussed. The blank value for the overall procedure was 1.0 (SD 0.59) .mu.g/l (22). The method was applied to **frozen whole blood**, plasma and serum samples. For whole blood samples from 11 healthy subjects the mean value was as low as 1.6 (SD 1.29) .mu.g Al/l (n = 22).

L37 ANSWER 21 OF 26 BIOSIS COPYRIGHT 1999 BIOSIS

1983:168548 Document No.: BA75:18548. CRYO PRESERVATION OF HUMAN MONONUCLEAR CELLS FOR QUALITY CONTROL IN CLINICAL IMMUNOLOGY 1. CORRELATIONS IN RECOVERY OF KILLER CELL AND NATURAL KILLER CELL FUNCTIONS SURFACE MARKERS AND MORPHOLOGY. STRONG D M; ORTALDO J R; PANDOLFI F; MALUISH A; HERBERMAN R B. TRANSPLANTATION RES. BRANCH, CASUALTY CARE RES. PROGRAM CENT., NAVAL MED. RES. INST., BETHESDA, MARYLAND 20814.. J CLIN IMMUNOL, (1982) 2 (3), 214-221. CODEN: JCIMDO. ISSN: 0271-9142. Language: English.

AB **Cryopreserved** human peripheral **blood** mononuclear cells (PBMC) were tested for natural killer (NK) and antibody-dependent cellular cytotoxicity (ADCC) and for high-affinity (29.degree. C) and total

(4.degree. C) rosette formation with sheep erythrocytes. PBMC produced variable NK activity following freezing and thawing, but consistently reacted well in ADCC. A significant correlation was found between low NK activity and a decreased percentage of low-affinity rosette-forming cells.

The number of large granular lymphocytes (LGL), among which NK cells are restricted, and the reactivity with the monoclonal antibody OKT10, which recognizes the majority of LGL in the peripheral blood, were not significantly altered by cryopreservation. Cryopreserved cells proved to be excellent controls for determining the day-to-day variability of the NK **assay** and for selecting optimum conditions for this **test** in the clinical immunological laboratory.

L37 ANSWER 22 OF 26 MEDLINE

81261049 Document Number: 81261049. Successful engraftment of blood derived normal hemopoietic stem cells in chronic myelogenous leukemia. Korbling M; Burke P; Braine H; Elfenbein G; Santos G; Kaizer H. EXPERIMENTAL HEMATOLOGY, (1981 Jul) 9 (6) 684-90. Journal code: EPR. ISSN: 0301-472X. Pub. country: Denmark. Language: English.

AB The ability of blood-derived stem cells to restore hemopoietic function was investigated in a patient with chronic myelogenous leukemia with bone marrow cells containing the Philadelphia chromosome marker (Ph1+). After treatment with high dose cyclophosphamide, 26.3 X 10(9) blood mononuclear leukocytes, among them 26.2 X 10(5) granulocyte/macrophage progenitor cells (CFUC), were harvested by means of 5 successive leukaphereses when the bone marrow cells had converted to Ph1--. When the patient entered the aggressive phase (blast crisis), myeloablative treatment with busulfan (16 mg/kg) and cyclophosphamide (200 mg/kg) was given, followed by **transfusion** of the **cryopreserved blood** leukocytes. Restoration of marrow and blood cellularity was completed about 20 days after this autologous blood stem cell transplantation (ABSCT). Marrow CTUC recovery was complete 2 weeks after ABSCT, and all karyotypes of the patient's marrow cells were free of the marker chromosome. The patient died of **toxicity** but with normal bone marrow cellularity. This report confirms the therapeutic usefulness of autologous blood-derived stem cells harvested in remission in restoring hemopoietic function after myeloablative treatment.

L37 ANSWER 23 OF 26 MEDLINE

81106590 Document Number: 81106590. Prolonged defibrination syndrome after green pit viper bite with persisting venom activity in patient's blood. Visudhiphan S; Dumavibhat B; Trishnananda M. AMERICAN JOURNAL OF CLINICAL PATHOLOGY, (1981 Jan) 75 (1) 65-9. Journal code: 3FK. ISSN: 0002-9173. Pub. country: United States. Language: English.

AB Venom activity in citrated plasma from a patient with a green pit viper bite was demonstrated by **measuring** its ability to decrease fibrinogen levels in normal plasma for six days after the bite. By in-vitro study, the minimal amount of crude venom to induce hypofibrinogenemia was 0.5 microgram/ml of normal plasma. The findings explained the continuing defibrination with bleeding and especially the failure of fresh-**frozen** plasma **transfusion** to correct hypofibrinogenemia in this patient. The most beneficial therapy should therefore be the neutralization of venom by antivenin, for as long as abnormal coagulation profiles are present, to discontinue the defibrinating process. The preparation of potent antivenin must be encouraged.

L37 ANSWER 24 OF 26 BIOSIS COPYRIGHT 1999 BIOSIS
1977:162165 Document No.: BA63:57029. CELLULAR PRE SENSITIZATION TO ALLO ANTIGENS IN HEMO DIALYZED PATIENTS. GLUCKMAN J-C; GLUCKMAN E; ANDERSEN E; ROTTEMBOURG J. TRANSPLANTATION (BALTIMORE), (1977) 23 (1), 65-72. CODEN: TRPLAU. ISSN: 0041-1337. Language: Unavailable.

AB The state of cellular alloimmunity in hemodialyzed patients was assessed by a microcytotoxicity **assay** and compared with that in healthy donors. Some of the patients were also studied during the weeks following a 1st kidney transplant rejection. For comparison, lymphocytes of multiparous women were studied. Skin fibroblasts from a panel of normal donors were used as targets, and effector cells were **cryopreserved** peripheral **blood** lymphocytes. Lymphocyte-mediated cytotoxicity (LMC) demonstrated restricted reactivity against target cells, an indication of specificity. It **detected** presensitization more often than a standard **test** for cytotoxic antibodies. This difference is not attributable to differences in sensitivity of the 2 **tests**, since some patients were at least once LMC negative and cytotoxic antibody positive, and the antigens **detected** by both **tests** were different in patients who had positive LMC and cytotoxic antibodies simultaneously. In some experiments LMC target determinants were not HL-A serologically **detectable** antigens. Lymphocytes obtained after transplant rejection were cytotoxic for targets which did not share the donors' serological mismatches. Antigens other than HL-A-A and B may be the determinants recognized in the microcytotoxicity **assay**.

L37 ANSWER 25 OF 26 BIOSIS COPYRIGHT 1999 BIOSIS
1976:225950 Document No.: BA62:55950. STUDIES OF LYMPHOCYTE DEPENDENT ANTIBODIES TO LEUKEMIA ASSOCIATED ANTIGENS USING FROZEN STORED LEUKEMIA TARGET CELLS. DURANTEZ A; ZIGHELBOIM J. TRANSPLANTATION (BALTIMORE), (1976) 22 (2), 190-196. CODEN: TRPLAU. ISSN: 0041-1337. Language: Unavailable.

AB The ability of frozen stored leukemia blast cells to participate in a lymphocyte-dependent antibody **assay** (LDA) was demonstrated. Frozen stored acute myelogenous and lymphocytic blast cells retained antigenicity and high viability (.gtoreq. 80%). High titer LDA reactivity against frozen stored leukemic blasts was demonstrated with heterologous (rabbit) and homologous (leukemia patient) antisera. The ability of **frozen** stored peripheral **blood** mononuclear cells to mediate effectively the destruction of antibody-coated leukemia blast cells stored frozen in liquid nitrogen before use was demonstrated. These findings will facilitate the study of LDA and antibody-dependent cellular cytotoxicity in human leukemia patients using a completely autogeneic system.

L37 ANSWER 26 OF 26 CAPLUS COPYRIGHT 1999 ACS
1973:415356 Document No. 79:15356 Preservability of rat serum during deferred determination of some hematochemical parameters. Bramanti, G.; Ravina, A.; De Fina, V. (Lab. Ric., Guidotti e C. S.p.A., Pisa, Italy). Boll. Chim. Farm., 111(11), 694-9 (Italian) 1972. CODEN: BCFAAI.

AB Auto-Analyzer techniques were used to **assay** several rat blood components after the blood had been stored at various temps. and for different periods, and the results were compared with those on fresh blood in order to det. the feasibility of storing blood taken during prolonged drug-**toxicity** studies and 1-time **assay** of the multiple samples at a later date. Storage for 1 month at 4.degree. was not detrimental to the **assays** of blood glucose, nonprotein N, protein, alk. phosphatase, and glutamic-oxalacetic transaminase or of added bromosulfophthalein. However, storage at -25.degree. was necessary

to preserve cholesterol for > 2 days. The detn. of glutamic-pyruvic transaminase must be carried out within 48 hr after sampling, regardless of whether the **blood** is stored **frozen** or at 4.degree..

```
'IN' IS NOT A VALID FIELD CODE
L38          154 FILE MEDLINE
L39          272 FILE CAPLUS
L40          252 FILE BIOSIS
'IN' IS NOT A VALID FIELD CODE
L41          137 FILE EMBASE
L42           25 FILE WPIDS

TOTAL FOR ALL FILES
L43          840 WENDEL A?/AU,IN


'IN' IS NOT A VALID FIELD CODE
L44           33 FILE MEDLINE
L45           55 FILE CAPLUS
L46           83 FILE BIOSIS
'IN' IS NOT A VALID FIELD CODE
L47           32 FILE EMBASE
L48            7 FILE WPIDS

TOTAL FOR ALL FILES
L49          210 HARTUNG T?/AU,IN

=> s l43 and l49
L50           13 FILE MEDLINE
L51           17 FILE CAPLUS
L52           34 FILE BIOSIS
L53           14 FILE EMBASE
L54            2 FILE WPIDS

TOTAL FOR ALL FILES
L55           80 L43 AND L49

=> s l12 and l55
L56            0 FILE MEDLINE
L57            0 FILE CAPLUS
L58            0 FILE BIOSIS
L59            0 FILE EMBASE
L60            0 FILE WPIDS

TOTAL FOR ALL FILES
L61            0 L12 AND L55

=> s l61 and ((cryopreserv? or frozen)(2a)(blood or whole blood or transfus?))
L62            0 FILE MEDLINE
<------User Break------>

SEARCH ENDED BY USER

=> s l55 and ((cryopreserv? or frozen)(2a)(blood or whole blood or transfus?))
L64            0 FILE MEDLINE
L65            1 FILE CAPLUS
L66            0 FILE BIOSIS
L67            0 FILE EMBASE
L68            0 FILE WPIDS
```

TOTAL FOR ALL FILES
L69 1 L55 AND ((CRYOPRESERV? OR FROZEN)(2A)(BLOOD OR WHOLE BLOOD OR TRANSFUS?))

=> d cbib abs;del his y

L69 ANSWER 1 OF 1 CAPLUS COPYRIGHT 1999 ACS
1998:466459 Document No. 129:92589 The usage of **frozen blood** for **blood** response tests. **Wendel, Albrecht**; Hartung, Thomas (Wendel, Albrecht, Germany; Hartung, Thomas; DPC Biermann G.m.b.H.). Eur. Pat. Appl. EP 851231 A1 19980701, 8 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (German). CODEN: EPXXDW. APPLICATION: EP 1997-122072 19971215. PRIORITY: DE 1996-19654266 19961223.

AB The invention concerns the application of **frozen blood** or **blood** prepn. for testing blood response via measuring blood factors from leukocytes triggered by immunoactivators such as pyrogens. Blood prepns. are e.g. leukocytes; the frozen material contains **cryopreservation** substances, and **blood** coagulation factors. Thus citrate blood was withdrawn from healthy patients, mixed with 10% dimethylsulfoxide, 100 .mu.L aliquotes were dispensed into Eppendorf tubes and frozen to -70.degree.C. After thawing lipopolysaccharide of Salmonella abortus equi was added as pyrogen; after incubation in CO2 the tubes were centrifuged; the supernatant was used to det. IL-1.beta. in an ELISA. The amt. of IL-1.beta. was also measured when different amts. of azathioprin or dexamethason were added to the immunoactivated system.